

## WEST Search History





DATE: Friday, June 04, 2004

Hide?	Set Name	Query	Hit Count
		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L14	(igf1 or igf-1) same crystal\$8	14
<input type="checkbox"/>	L13	L11 and orthrohmbic	0
<input type="checkbox"/>	L12	L11 and c2221	1
<input type="checkbox"/>	L11	L10 and diffraction	100
<input type="checkbox"/>	L10	L9 and (three adj1 dimensional structure or x-ray or 3-d structure)	638
<input type="checkbox"/>	L9	(IGF-1 or IGF1) and crystal\$6	1369
<input type="checkbox"/>	L8	(IGF-1 or IGF1) and \$crystal6	0
<input type="checkbox"/>	L7	IGF adj1 1 and \$crystal6	0
<input type="checkbox"/>	L6	L5 and atomic coordinate	5
<input type="checkbox"/>	L5	somatomedin and (three adj2 dimensional structure or 3-d structure or x-ray)	399
<input type="checkbox"/>	L4	somatomedin and (three adj3 structure or x-ray)	414
<input type="checkbox"/>	L3	somatomedin same crystal	1
<input type="checkbox"/>	L2	L1 and crystal	325
<input type="checkbox"/>	L1	somatomedin	1529

END OF SEARCH HISTORY

## Hit List

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACS				

Search Results - Record(s) 1 through 14 of 14 returned.

☐ 1. Document ID: US 20040105888 A1

Using default format because multiple data bases are involved.

L14: Entry 1 of 14

File: PGPB

Jun 3, 2004

PGPUB-DOCUMENT-NUMBER: 20040105888  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20040105888 A1

TITLE: Buoyant polymer particles for delivery of therapeutic agents to the central nervous system

PUBLICATION-DATE: June 3, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Pratt, Daniel	Amesbury	MA	US	
MacAusland, Samuel S.	Wellesley	MA	US	
Baker, Keith	Danvers	MA	US	

US-CL-CURRENT: 424/486

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. Data
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☐ 2. Document ID: US 20030148968 A1

L14: Entry 2 of 14

File: PGPB

Aug 7, 2003

PGPUB-DOCUMENT-NUMBER: 20030148968  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030148968 A1

TITLE: Techniques and compositions for treating cardiovascular disease by in vivo gene delivery

PUBLICATION-DATE: August 7, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Hammond, H. Kirk	La Jolla	CA	US	
Dillmann, Wolfgang	Solana Beach	CA	US	

Giordano, Frank J. Madison CT US

US-CL-CURRENT: 514/44; 604/500

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 3. Document ID: US 20030124197 A1

L14: Entry 3 of 14

File: PGPB

Jul 3, 2003

PGPUB-DOCUMENT-NUMBER: 20030124197  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030124197 A1

TITLE: Compositions and methods for improving integrity of compromised body passageways and cavities

PUBLICATION-DATE: July 3, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Signore, Pierre E.	Vancouver		CA	
Machan, Lindsay S.	Vancouver		CA	

US-CL-CURRENT: 424/499; 424/501, 514/283, 514/449, 514/54, 514/55

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 4. Document ID: US 20030092631 A1

L14: Entry 4 of 14

File: PGPB

May 15, 2003

PGPUB-DOCUMENT-NUMBER: 20030092631  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030092631 A1

TITLE: IGF antagonist peptides

PUBLICATION-DATE: May 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deshayes, Kurt D.	San Francisco	CA	US	
Lowman, Henry B.	El Granada	CA	US	
Schaffer, Michelle L.	Cambridge	CA	GB	
Sidhu, Sachdev S.	San Francisco		US	

US-CL-CURRENT: 514/14; 530/326

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 5. Document ID: US 20030054973 A1

L14: Entry 5 of 14

File: PGPB

Mar 20, 2003

PGPUB-DOCUMENT-NUMBER: 20030054973  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030054973 A1

TITLE: Methods and compositions for the repair and/or regeneration of damaged  
myocardium

PUBLICATION-DATE: March 20, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Anversa, Piero	New York	NY	US	

US-CL-CURRENT: 514/1; 435/372

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw D
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☐ 6. Document ID: US 20030050262 A1

L14: Entry 6 of 14

File: PGPB

Mar 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030050262  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030050262 A1

TITLE: Inhibition of neurodegeneration

PUBLICATION-DATE: March 13, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Wands, Jack R.	Waban	MA	US	
Monte, Suzanne M. de la	East Greenwich	RI	US	

US-CL-CURRENT: 514/44; 435/368

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw D
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☐ 7. Document ID: US 20030027202 A1

L14: Entry 7 of 14

File: PGPB

Feb 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030027202  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030027202 A1

TITLE: Methods of screening compounds for bioactivity in organized tissue

PUBLICATION-DATE: February 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Vandenburgh, Herman H.	Providence	RI	US	
Valentini, Robert F.	Cranston	RI	US	

US-CL-CURRENT: 435/6; 435/4, 435/7.21

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw. De
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☐ 8. Document ID: US 20020165155 A1

L14: Entry 8 of 14

File: PGPB

Nov 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020165155

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020165155 A1

TITLE: Crystallization of IGF-1

PUBLICATION-DATE: November 7, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Schaffer, Michelle	Cambridge	CA	GB	
Ultsch, Mark	Mill Valley	CT	US	
Vajdos, Felix	Ledyard		US	

US-CL-CURRENT: 514/12; 530/350, 702/19

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw. De
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☐ 9. Document ID: US 20020106627 A1

L14: Entry 9 of 14

File: PGPB

Aug 8, 2002

PGPUB-DOCUMENT-NUMBER: 20020106627

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020106627 A1

TITLE: METHODS OF SCREENING COMPOUNDS FOR BIOACTIVITY IN ORGANIZED TISSUE

PUBLICATION-DATE: August 8, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
VANDENBURGH, HERMAN H.	PROVIDENCE	RI	US	

VALENTINI, ROBERT F.

CRANSTON

RI

US

US-CL-CURRENT: 435/4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 10. Document ID: US 20020022055 A1

L14: Entry 10 of 14

File: PGPB

Feb 21, 2002

PGPUB-DOCUMENT-NUMBER: 20020022055

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020022055 A1

TITLE: Composition and methods for immproving integrity of compromised body  
passageways and cavities

PUBLICATION-DATE: February 21, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Signore, Pierre E	Vancouver British Columbia		CA	

US-CL-CURRENT: 424/486

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 11. Document ID: US 6124259 A

L14: Entry 11 of 14

File: USPT

Sep 26, 2000

US-PAT-NO: 6124259

DOCUMENT-IDENTIFIER: US 6124259 A

TITLE: Method for treating ophthalmic disorders with IGFBP

DATE-ISSUED: September 26, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Delmage; Michael J.	Scotts Valley	CA		
Sommer; Andreas	Pleasanton	CA		

US-CL-CURRENT: 514/12; 435/69.1, 530/324, 530/350

## ABSTRACT:

This is a method for treating ophthalmic disorders associated with an excess of IGF-I or IGF-II. The method comprises administering individuals with an IGF excess insulin-like growth factor binding protein (IGFBP). The preferred form is IGFBP-3.

14 Claims, 0 Drawing figures  
Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw. De
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☐ 12. Document ID: WO 2064627 A2

L14: Entry 12 of 14

File: EPAB

Aug 22, 2002

PUB-NO: WO002064627A2  
DOCUMENT-IDENTIFIER: WO 2064627 A2  
TITLE: CRYSTALLIZATION OF IGF-1

PUBN-DATE: August 22, 2002

INVENTOR-INFORMATION:

NAME

COUNTRY

SCHAFER, MICHELLE

ULTSCH, MARK

VAJDOS, FELIX

INT-CL (IPC): C07 K 14/65; C30 B 29/58  
EUR-CL (EPC): C07K014/65

ABSTRACT:

Crystalline IGF-1 is provided along with a method for production thereof. Crystallizing IGF-1 comprises the steps of mixing an aqueous solution comprising IGF-1 with a reservoir solution comprising a precipitant to form a mixture; and crystallizing the mixture, optionally also recrystallizing and isolating the crystalline IGF-1. In addition, a method for identifying IGF-1 indirect agonists is provided using a detergent as a standard for the level of inhibition of binding of IGFBP-1 or IGFBP-3 to IGF-1 and/or using the coordinates of the binding pockets of IGF-1 to which a candidate indirect agonist binds for structure-based drug design.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw. De
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☐ 13. Document ID: WO 9928347 A1

L14: Entry 13 of 14

File: EPAB

Jun 10, 1999

PUB-NO: WO009928347A1  
DOCUMENT-IDENTIFIER: WO 9928347 A1  
TITLE: METHOD OF DESIGNING AGONISTS AND ANTAGONISTS TO IGF RECEPTOR

PUBN-DATE: June 10, 1999

INVENTOR-INFORMATION:

NAME

COUNTRY

BENTLEY, JOHN DAVID	AU
COSGROVE, LEAH JANE	AU
FRENKEL, MAURICE JOHN	AU
GARRETT, THOMAS PETER JOHN	AU
LAWRENCE, LYNNE JEAN	AU
LOU, MEIZHEN	AU
LOVRECZ, GEORGE OSCAR	AU
MCKERN, NEIL MORETON	AU
TULLOCH, PETER ARCHIBALD	AU
WARD, COLIN WESLEY	AU

INT-CL (IPC): C07 K 14/705; C07 K 14/71; G06 F 17/50; G06 F 19/00; G06 F 159/00  
 EUR-CL (EPC): C07K014/65

## ABSTRACT:

CHG DATE=19990803 STATUS=O>The present invention relates to a method of designing compounds able to bind to a molecule of the insulin receptor family and to modulate the activity mediated by the receptor based on the 3-D structure coordinates of a IGF-1 receptor crystal of Figure 1.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWC	Draw D
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☐ 14. Document ID: AU 2002255508 A1, WO 200264627 A2, US 20020165155 A1, EP 1358209 A2

L14: Entry 14 of 14

File: DWPI

Aug 28, 2002

DERWENT-ACC-NO: 2002-723170

DERWENT-WEEK: 200427

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TITLE: Crystal formed by insulin-like growth factor-1, IGF-1, useful for treating agonist disorders, diffracts x-ray radiation to produce a diffraction pattern representing the three-dimensional structure of IGF-1

INVENTOR: SCHAFFER, M; ULTSCH, M ; VAJDOS, F

PRIORITY-DATA: 2001US-287072P (April 27, 2001), 2001US-267977P (February 9, 2001), 2002US-0066009 (February 1, 2002)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>AU 2002255508 A1</u>	August 28, 2002		000	C07K014/65
<u>WO 200264627 A2</u>	August 22, 2002	E	067	C07K014/65
<u>US 20020165155 A1</u>	November 7, 2002		000	A61K038/18
<u>EP 1358209 A2</u>	November 5, 2003	E	000	C07K014/65

INT-CL (IPC): A61 K 38/18; C07 K 14/475; C07 K 14/65; C30 B 29/58; G01 N 33/48; G01



N 33/50; G06 F 19/00

ABSTRACTED-PUB-NO: WO 200264627A

BASIC-ABSTRACT:

NOVELTY - A crystal (I) formed by insulin-like growth factor-1 (IGF-1) that diffracts x-ray radiation to produce a diffraction pattern representing the three-dimensional structure of IGF-1, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a composition (II) comprising (I), and a carrier;
- (2) crystallizing (M1) IGF-1, involves mixing an aqueous solution comprising IGF-1 with a reservoir solution comprising a precipitant to form a mixed volume, and crystallizing the mixed volume;
- (3) crystalline IGF-1 (III) produced by (M1);
- (4) identifying (M2) indirect agonists of IGF-1, involves:
  - (a) comparing the ability of N,N-bis(3-D-gluconamidopropyl)- deoxycholamine to inhibit binding of IGF binding protein 1 (IGFBP-1) or IGFBP-3 to IGF-1 with the ability of a candidate indirect agonist of IGF-1 to inhibit binding, and determining whether the candidate agonist inhibits such binding as well as N,N-bis(3-D-gluconamidopropyl)-deoxychol- amine; or
  - (b) co-crystallizing a candidate direct agonist IGF-1 with IGF-1 to form a co-crystalline structure and determining if the candidate agonist binds to one or both of two patches on IGF-1, where one patch has the amino acid residues Glu3, Thr4, Leu5, Asp12, Ala13, Phe16, Val17, Cys47, Ser51, Cys52, Asp53, Leu54 and Leu57, and the second patch has the amino acid residues Val11, Gln15, Phe23, Phe25, Asn26, Val44, Phe49 and Arg55, and binding occurs if there is a contact between each listed amino acid residue of a given patch and the candidate agonist that is less than or equal to 6 Angstrom in the co-crystalline structure;
- (5) a co-crystalline complex (IV) of IGF-1 and N,N-bis(3-D-gluconamidoprop- yl)- deoxycholamine;
- (6) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data that, when read by an appropriate machine, displays a three-dimensional representation of a crystal of a molecule comprising IGF-1;
- (7) an IGF-1 crystal (V) with the structural coordinates of fully defined in the specification;
- (8) identifying (M3) IGF-1 agonists or antagonists, involves crystallizing IGF-1 to form IGF-1 crystals containing a group of amino acid residues defining an IGF-1 receptor-binding region, irradiating the IGF-1 crystals to obtain a diffraction pattern of the IGF-1 crystals, determining a three-dimensional structure of IGF-1 from the diffraction pattern, and identifying an IGF-1 agonist or antagonist having a three-dimensional structure that functionally duplicates essential IGF receptor-binding, solvent-accessible residues presenting the three-dimensional structure of the IGF-1 receptor-binding region, and has altered signal transduction capacity to IGF-1-responsive cells, as compared to IGF-1;
- (9) identifying (M4) a peptidomimetic that binds IGF-1 and blocks binding of an IGFBP or a receptor that binds to IGF-1, involves searching a molecular structure database with the structural parameters or structural coordinates fully defined in

the specification, and selecting a molecule from the database that mimics the structural parameters or coordinates;

(10) determining (M5) a portion of a three-dimensional structure of a molecular complex comprising IGF-1, involves determining the structural coordinates of a crystal of IGF-1, calculating phases from the structural coordinates, calculating an electron density map from the obtained phases, and determining the structure of a portion of the complex based on the electron density map;

(11) evaluating (M6) the ability of a chemical entity to associate with IGF-1 or its complex, by employing computational or experimental unit to perform a fitting operation between the chemical entity and the IGF-1 or its complex, to obtain data related to the association, and analyzing the obtained data to determine the characteristics of the association between the chemical entity and the IGF-1 or its complex;

(12) a chemical entity (VI) identified by the above method, that interferes with in vivo or in vitro association between IGF-1 and its receptor or between IGF-1 and one of its binding proteins, or associates with a binding site on IGF-1;

(13) determining (M7) a three-dimensional structure of IGF-1, involves crystallizing the IGF-1, irradiating the crystalline IGF-1 to obtain a diffraction pattern characteristic of the crystalline IGF-1, and transforming the diffraction pattern into the three-dimensional structure of IGF-1; and

(14) a heavy-atom derivative (VII) of a crystallized form of IGF-1.

ACTIVITY - Antidiabetic; Anorectic; Cardiant; Anti-HIV; Immunostimulant.

MECHANISM OF ACTION - Agonist of IGF-1.

No biological data given.

USE - (I) including an IGF-1 receptor-binding region, is useful for identifying compounds having structures that interact with the receptor-binding region of the three-dimensional structure of IGF-1 and function as an IGF-1 agonist or antagonist. (II) is useful for treating a mammal, especially human suffering from an agonist disorder such as diabetes, obesity, heart dysfunction, acquired immunodeficiency syndrome (AIDS)-related wasting, kidney disorder, neurological disorder, whole body growth disorder or immunological disorder. (III) is useful for computationally or experimentally evaluating a chemical entity to obtain information about its association with a binding site of IGF-1. (M4) is useful for designing a compound that mimics the 3-dimensional surface structure of IGF-1 (claimed). (I) is useful as standard or control in a diagnosing setting, for e.g. as a molecular weight marker or ELISA, radioassay, radioreceptor assay control; and studying binding properties of IGF-1, IGF-BPs and IGF-1 receptors. (III) is useful for designing chemical entities that bind to or associate with IGF-1, and for altering physical properties of the chemical entities in different ways. (IV) and indirect agonist identified by (M2) are useful for treating the above mentioned agonist disorders, including immuno-deficiencies, Turner's syndrome, insulin resistance and necrosis. (III) is useful for solving the crystal structures of mutants, co-complexes, or crystalline form of any other molecule homologous to or capable of associating with a portion of IGF-1.

DESCRIPTION OF DRAWING(S) - The figure shows a ribbon diagram of IGF-1 showing the backbone fold.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw De
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Terms	Documents
(igf1 or igf-1) same crystal\$8	14

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